

Part II

Environmental Quality Trends and Access to Information Resources

Introduction

One of the most remarkable developments of the 1990s is the explosive growth of information on the World Wide Web. For those with a computer and access to the Internet, this is an extraordinary new opportunity to easily and quickly obtain a wide variety of studies, reports, and data.

In response to this development, the 1997 edition of *Environmental Quality* reports on environmental trends and provides a guide to additional online materials on those topics that are available to the general public. The particular focus of this guide is sites within the U.S. government dealing with environmental quality, natural resources, energy, and other environmentally related issues.

This report can help steer readers to the voluminous amounts of online material provided by the U.S. government, other governments, nongovernmental organizations, international institutions, universities and research institutions. *Environmental Quality 1997* is a valuable starting point for students, researchers, and the general public to find out more about environmental quality in the United States and around the world. It is useful way for the public to access the diverse online resources of the federal government that pertain to environmental issues.

This report serves several purposes. First, it will be published as the 1997 edition of *Environmental Quality*. Second, it

will be placed on the White House website in PDF format as *Environmental Quality 1997*. In addition, the statistical tables in Part III of this report and the list of online resources for each chapter will appear as part of CEQ's new *Environmental Quality Statistics* web page (currently under construction) in HTML format. The HTML format will enable users to download the statistical tables and link to hundreds of other government and nongovernment sites with useful information on environmental quality.

As a Web document, *Environmental Quality 1997* will be periodically updated to include new reports, new website addresses, and new data as soon as they become available. In this way, users will have instant access to the latest data on environmental quality and will be able to easily download and analyze the data.

In this context, it is important to note that this report is only a starting point. Particularly in its listings of nongovernmental organizations, it is intended to be suggestive rather than exhaustive. In its future life on the World Wide Web, this report will be periodically updated and additional organizations will be added. Suggestions for additional website listings or other comments are welcome and can be sent to Council on Environmental Quality, Administrative Officer, 722 Jackson Place, NW, Washington, DC, 20503.

This report is organized to correspond to the tables that have been published in *Environmental Quality* in the past. Each chapter includes a brief introduction, a section describing current environmental trends, and a section describing some useful online sources of information on the subject.

A few websites provide comprehensive guides to environmental and other data. These sites are described in this chapter.

DIRECTORIES

A Guide to Selected National Environmental Statistics in the U.S. Government (<http://www.epa.gov/ceisweb1/ceishome/digitallib/estatgov.html>)

A Guide to Selected National Environmental Statistics in the U.S. Government (1993) was prepared by members of the Environmental Statistics and Information Division in the Office of Policy, Planning, and Evaluation at the U.S. Environmental Protection Agency. The *Guide* is a reference to selected, frequently sought after, national level, time-series environmental statistics that are compiled and distributed by the U.S. government on a regular basis. It is a directory to various environmental statistical programs and the data they collect, but it is not intended to supplant information that can be obtained directly from the government agencies.

The statistical programs in the *Guide* are arranged by government department, agency and program title. The *Guide* also contains an index of over 150 key words and phrases and an index of 55 databases. Statistical coverage includes data related

to state-of-the-environment (e.g., air and water quality, status of biotic resources), pressures on the environment (e.g., energy use, mining, transportation, etc.), human health and welfare issues (e.g., exposure to toxic chemicals), and societal responses to environmental problems (e.g., pollution abatement expenditures, cleanup of toxic wastes, etc.).

The 1993 publication is the second edition of the *Guide*. A third edition is in preparation.

Guide to Global Environmental Statistics (<http://www.wri.org/sdis/global-g/index.html>)

The *Guide to Global Environmental Statistics* (1998), which was produced by the World Resources Institute, is an electronic directory that provides summary information on 68 environmentally related statistical programs in 36 different international organizations.

There are several ways to find information. There is a table of contents organized alphabetically by organization and an index of key subject terms. The *Guide* includes a general description of the purpose and major activities of the institution housing the statistical program, detailed information on the data being compiled and reported and the units of measurement, information about the time period covered by each measurement, and information on how the data was collected and what type of processing and analysis was used.

Federal Interagency Council on Statistical Policy (FedStats) (<http://www.fedstats.gov>)

More than 70 agencies in the U.S. government produce statistics of interest to the public. The Federal Interagency Council on Statistical Policy maintains this site to provide easy access to the full range of statistics and information produced by these agencies for public use. All of the statistical information available through FedStats is maintained and updated solely by federal agencies on their own Internet servers.

LIBRARIES

NEPANet

(<http://ceq.eh.doe.gov/nepa/nepanet.htm>)

This site, maintained by the White House Council on Environmental Quality, is a comprehensive source of information about the National Environmental Policy Act. The site includes the full text of the statute; regulations for implementing NEPA from CEQ and the agencies; agency NEPA web sites; guidance on scoping, NEPA regulations, pollution prevention, and environmental justice; recent CEQ annual reports; information about environmental impact analysis (where and how to file an EIS, EIS's available for review, statistics on EIS activity, EIS data links, and agency NEPA points of contact); environmental organizations; international environmental impact assessments; NEPA bibliographic information; and NEPA training information.

The site also includes two recent CEQ reports: *Considering Cumulative Effects under the National Environmental Policy Act*, and *NEPA—A Study of its Effectiveness After 25 Years*.

In addition, the site includes Environmental Text, a searchable library that provides easy access to environment, safety, and health data, federal and state statutes and regulations, as well as Indian Tribal Codes and Treaties and international agreements.

Center for Environmental Information and Statistics (CEIS) Digital Library of Environmental Quality
(<http://www.epa.gov/ceisweb1/ceishome/digitallib/>)

The CEIS Digital Library of Environmental Quality offers links to numerous state of the environment reports plus EPA documents grouped by category. The groupings include air, water, toxics, waste, living resources, data quality, and state of the environment reports.

The air category includes a guide to radon, several reports on climate change, information about measuring air quality, and the most recent National Air Quality and Emissions Trends Reports. The water category includes information about environmental indicators of water quality, an index of watershed indicators, and information about the Safe Drinking Water Act, the Clean Water Act, and the quality of the nation's water. The toxics category includes the current toxics release inventory data report, a report on municipal solid waste trends, and the national report on the Resource Conservation and Recovery Act (RCRA).

The living resources category includes a national summary of wetland resources. The data quality category includes a descriptive profile of the RCRA information system and the toxics release inventory.

The state of the environment reports category includes reports on communities, states, regions, the United States, other nations, and the world. The U.S. category includes the CEQ annual report, a State Department report on the environment and U.S. foreign policy, EPA's 25th Anniversary report, and NOAA's *Our Changing Planet*. The world category includes the United Nations Environment Programme's *Global State of the Environment Report 1997*, the Worldwatch Institute's *State of the World 1997*, and *World Resources 1996-97*.

National Library for the Environment
(<http://www.cnie.org>)

The Committee for the National Institute for the Environment (CNIE) was formed to promote a proposal for a non-regulatory science institute with a mission to improve the scientific basis for making environmental decisions. CNIE's website includes a National Library for the Environment. The site includes briefing books on climate change, ocean and coastal resources, and electric utility restructuring, plus information about educational resources, environmental journals, meetings and conferences, environmental laws and treaties, and a virtual library on biodiversity and ecology.

CNIE also has obtained and put on its website (http://www.cnie.org/nle/crs_catg2.html) many Congressional Research Service reports on environment, energy, and natural resources topics. These non-technical reports, prepared for members of Congress and not widely distributed, contain objective and nontechnical information that can be useful to people interested in environmental policy.

National Transportation Library
(<http://www.bts.gov/ntl/ntlmain.html>)

This site, maintained by the Bureau of Transportation Statistics of the U.S. Department of Transportation, contains several thousand full-text documents, and provides links to numerous other libraries addressing transportation issues. It includes publications on air pollution and other environmental effects of transportation, on transportation of hazardous materials, and on transportation-related energy use, including alternative fuels.

MULTI-MEDIA DATABASE QUERIES

Center for Environmental Information and Statistics Environmental Profiles
(<http://yosemite.epa.gov/ceis/CEIS.nsf>)

The CEIS site includes a section that enables users to obtain an environmental profile of their locality. The profile contains graphs and brief descriptions that summarize existing information on air quality, drinking water systems, surface water quality, hazardous waste, and reported toxic releases. Profiles are available for every state, county, and territory in the United States. Data in the profiles have been aggregated at the county level. Users can select a geographic area by selecting a state and county or by typing in their zip code.

EPA EnviroFacts Warehouse
(http://www.epa.gov/enviro/index_java.html)

EPA's *EnviroFacts Warehouse* provides a single point of access to select EPA environmental data, including Superfund data, safe drinking water information, hazardous waste data, toxics release inventory,

water discharge permits, and air releases. The site allows users to obtain an overview of available data, to query the database and generate reports from the data, and to produce maps of environmental information on demand.

EPA Environmental Indicators Website
(<http://www.epa.gov/indicators/>)

EPA's *Environmental Indicators Website* provides EPA data aggregated nationally or by state, county, or zip code as well as links to indicator reporting by other federal agencies, states, and other geographic areas. The site provides access to environmental data for the following subject areas: air quality nonattainment areas; solid and hazardous waste management; water quality inventory; safe drinking water indicators; wetland losses; toxics release inventory; and pesticides (Ecological Incident Information System).

FAOSTAT
(<http://apps.fao.org>)

FAOSTAT, maintained by the Food and Agriculture Organization of the United Nations, is an online and multilingual database currently containing over 1 million time-series records covering international statistics in the following areas: production, trade, food balance sheets, food aid shipments, fertilizer and pesticides, land use and irrigation, forest products, fishery products, population, and agricultural machinery.

FAOSTAT has recently added a new database (Codex Alimentarius) on maximum limits for pesticide residue in foods. It also provides quarterly updates of agricultural production and production indices data.

BRIEFING ROOMS

Social Statistics Briefing Room
(<http://www.whitehouse.gov/fsbr/ssbr.html>)

This White House site provides easy access to current federal social statistics, including statistics on crime, demography, education, and health. The information is maintained and updated by the statistical units of the relevant federal agencies.

Economic Statistics Briefing Room
(<http://www.whitehouse.gov/fsbr/esbr.html>)

This White House site provides access to current federal economic indicators and links to information produced by a number of federal agencies. The categories in this briefing room include: production, sales, orders, and inventories; output; income, expenditures, and wealth; employment, unemployment, and earnings; prices; money, credit, and interest rates; transportation; and international statistics.

ERS Briefing Room: Agricultural Resources and Environmental Indicators
(<http://www.econ.ag.gov/Briefing/arei/>)

The Economic Research Service produces numerous indicators that summarize the status of natural resource use in agriculture and associated environmental quality. Periodically these indicators are integrated into a single comprehensive report, *Agricultural Resources and Environmental Indicators*. As new data and information are collected, ERS publishes AREI updates to supplement and update information contained in AREI.

DATA ACCESS

More and more federal agencies are providing access to data in electronic format. Federal agencies utilize a variety of tools to enable users to access data on the Internet, either for viewing online, or for downloading to a local disk. Similarly, agencies package the data in different formats, ranging from raw data, to summary statistics in tabular form, to processed data in the form of charts and maps. Some of the data are available as flat “read only” files while other data are compiled “on the fly” using a database query/retrieval mechanisms. Some agencies offer more than one way to access data. Also online are footnotes that clarify and support the table data, table data sources, data quality profiles, and links to related information and tables.

In some cases, previously published data reports are now only available online. These data are updated on a regular basis (e.g., monthly, annually) to coincide with reporting schedules or periodically as new statistics are compiled. In addition, many agencies provide data and source information on CD-ROM and diskettes, which are sold for a nominal fee.

Some of the user-friendly technologies that CEQ uses to access data for annual reports are described below.

Viewing Data Tables Online

TEXT, ASCII, and HTML are the most common formats used for statistical data that can be viewed online using an Internet browser. Data tables in Adobe PDF format (Portable Document Format)

can also be viewed online with the help of Adobe Acrobat Reader (The Adobe PDF Reader program is available for downloading free from Adobe). Data tables in these file formats can be saved to local disk and opened with appropriate software. For example, TEXT files can be opened with WordPerfect®, Microsoft Word®, or other wordprocessing programs; HTML files can be opened with Internet browsers; and PDF files can be opened with Adobe Acrobat Reader.

Some of the table data that are available in TEXT or ASCII format include the Energy Information Administration's *Annual Energy Review*, the Bureau of Transportation Statistics' *National Transportation Statistics*, the Bureau of the Census' *Census of Population and Housing*, and most of the Carbon Dioxide Information and Analysis Center (CDIAC) digital databases.

The National Center for Health Statistics' *Data Warehouse*, the National Agricultural Statistics' *Statistical Highlights*, the Department of Energy's *Integrated Data Base (IDB) Reports: U.S. Spent Nuclear Fuel and Radioactive Waste Inventories, Projections, and Characteristics*, the U.S. Geological Survey (USGS) Water Resources Division's *National Water Conditions*, and data tables supporting the Natural Resources Conservation Service's *State of the Land* maps are some of the tabular resources available online in HTML format.

A growing number of data tables are available in PDF format, including CEQ's statistical appendix to several recent *Environmental Quality* annual reports, Office of Management and Bud-

get's historical statistics from the *Budget of the United States*, the Bureau of Land Management's *Public Lands Statistics*, the USGS Water Resources Division's *Estimated Use of Water in the United States in 1995*, the USGS Geologic Division's *Mineral Commodity Summaries*, the Federal Highway Administration's *Highway Statistics*, Bureau of the Census' *Statistical Abstract of the United States*, the National Marine Fisheries Service's *Fisheries of the United States*, and tables from the Environmental Protection Agency's *Toxics Release Inventory Report*, *Municipal Solid Waste Characterization Report*, *National Air Pollutant Emission Trends Report*, and *National Air Quality and Emissions Trends Report*.

Downloading Data to Local Disk

In addition to viewing data online, several agencies also provide an option to download data in spreadsheet format, either as an entire chapter, appendix, or book, or as a single file, so that the user can perform calculations on the data or produce charts and maps. Excel® and LOTUS 1-2-3® are the two most commonly used formats. The sponsoring agency usually saves the table data in a lower version of the software (e.g., Excel version 5.0 or LOTUS version 3.1) to enhance the likelihood that users can open the data files even if they do not have the latest version of Excel or LOTUS, or open them with other spreadsheet programs such as Quattro Pro® or Harvard Graphics®. Some agencies offer a choice between data in Excel or LOTUS spreadsheet formats. (It should

be noted that TEXT and ACSII data tables also can be opened using spreadsheet programs, although the user may encounter problems with the format of the downloaded file). Most of the agencies provide instructions to aid the user in downloading files.

Data tables that are available for downloading in spreadsheet format include the Energy Information Administration's *Annual Energy Review*, the Bureau of Transportation Statistics' *National Transportation Statistics*, Federal Highway Administration's *Highway Statistics*, Appendix B of the Council of Economic Advisor's *Economic Report of the President*, and the Office of Management and Budget's historical statistics from the *Budget of the United States*.

Other online data formats that can be imported into common computer spreadsheet programs after downloading include data saved in "delimited format," where characters such as tabs, commas, space, or semicolons separate each field; or data saved in "fixed width" format, where fields are aligned in columns with spaces between each field. Examples include the National Agricultural Statistics' annual *Agricultural Statistics Report* and U.S. Geological Survey's *1995 Estimated Water Use in the United States*.

Database Retrieval Systems

Several agencies make data and information available through an interactive database query that will produce user-defined tables, charts or maps for the nation or a particular geographical area. Instructions are provided to guide the

user through a choice of output formats (standard or custom; online or downloaded), the area for which the summary data will be produced (such as states or counties), what type of data will be included in the output, and for what years. After selecting the desired variables, the user submits the query and the requested information is retrieved from the database. The data output can then be viewed online or downloaded to local disk.

Among the many environmental data retrieval systems provided by federal agencies are the U.S. Forest Service's *Forest Inventory and Analysis Database Retrieval System* and its *Timber Product Output (TPO) Database Retrieval System*; the National Marine Fisheries Service's *Annual and Monthly Commercial Landing Statistics*; the National Park Service's *Visitation Database*; the USGS Biological Resources Division's *North American Breeding Bird Survey: Results and Analysis 1966-1996*; the National Register for Historic Preservation's *National Register Information System*; the USGS *National Atmospheric Deposition Program / National Trends Network (NADP/NTN) Database Retrieval System*; and EPA's *CEIS Environmental Profiles, EnviroFacts Warehouse, Environmental Indicators Website*, and *Aerometric Information Retrieval System (AIRS)*.

(Note: Reference to software products in this chapter does not reflect any endorsement by the federal government.)

SELECTED FEDERAL AGENCYWEB PAGES (as of December 31, 1998)

Executive Office of the President

Council of Economic Advisors
(<http://www.whitehouse.gov/WH/EOP/CEA/html/CEA.html>)

Council on Environmental Quality
(<http://www.whitehouse.gov/CEQ/>)

Office of Management and Budget
(<http://www.whitehouse.gov/OMB>)

Office of Science and Technology Policy
(<http://www.whitehouse.gov/OSTP>)

Department of Agriculture

(<http://www.usda.gov>)

Economic Research Service
(<http://www.econ.ag.gov/>)

National Agricultural Statistics Service
(<http://www.usda.gov/nass/>)

Natural Resources Conservation Service
(<http://www.nrcs.usda.gov/>)

U.S. Forest Service
(<http://www.fs.fed.us/>)

Department of Commerce

(<http://www.doc.gov>)

Bureau of Economic Analysis
(<http://www.bea.doc.gov/>)

Bureau of the Census
(<http://www.census.gov/>)

National Oceanic and Atmospheric Administration
(<http://www.noaa.gov/>)

National Ocean Service
(<http://www.nos.noaa.gov/>)

Coastal Ocean Program
(<http://www.cop.noaa.gov/>)

National Marine Fisheries Service
(<http://www.nmfs.gov/>)

Office of Oceanic and Atmospheric
Research
(<http://www.oar.noaa.gov/>)

Office of Global Programs
(<http://www.ogp.noaa.gov/>)

National Weather Service
(<http://www.nws.noaa.gov/>)

National Environmental Satellite,
Data and Information Service
(<http://www.nesdis.noaa.gov/>)

National Climatic Data Center
(<http://www.ncdc.noaa.gov/>)

Department of Defense

U.S. Army Corps of Engineers
(<http://www.usace.army.mil/>)

Engineering Division
(<http://www.usace.army.mil/inet/functions/cw>)

Department of Energy

(<http://www.doe.gov>)

Energy Information Administration
(<http://www.eia.doe.gov/>)

Environmental Management Program
(<http://www.em.doe.gov/>)

Oak Ridge National Laboratory
(<http://www.ornl.gov/>)

Carbon Dioxide Information
Analysis Center
(<http://cdiac.esd.ornl.gov/>)

Center for Transportation Analysis
(<http://www.cta.ornl.gov/>)

Department of Health and Human Services

Centers for Disease Control and
Prevention
(<http://www.cdc.gov/>)

National Center for Health Statistics
(<http://www.cdc.gov/nchswwww/>)

Agency for Toxic Substances and
Disease Registry
(<http://atsdr1.atsdr.cdc.gov:8080/atsdrhome.html>)

Food and Drug Administration
(<http://www.fda.gov/default.htm>)

Department of the Interior

(<http://www.doi.gov/>)

Bureau of Land Management
(<http://www.blm.gov/>)

Bureau of Reclamation
(<http://www.usbr.gov/main/index.html>)

National Park Service
(<http://www.nps.gov/>)

Office of Surface Mines
(<http://www.osmre.gov/osm.htm>)

U.S. Fish and Wildlife Service
(<http://www.fws.gov/>)

Division of Endangered Species
(<http://www.fws.gov/r9endspp/endspp.html>)

National Wetlands Inventory
(<http://www.nwi.fws.gov/text.html>)

Office of Migratory Bird Management
(<http://www.fws.gov/r9mbmo/homepg.html>)

U.S. Geological Survey
(<http://www.usgs.gov/>)

Biological Resources Division
(<http://www.nbs.gov/>)

Geologic Division
(<http://geology.usgs.gov/index.shtml>)

Mapping Division
(<http://mapping.usgs.gov/>)

Water Resources Division
(<http://water.usgs.gov/>)

Department of Transportation
(<http://www.dot.gov/>)

Bureau of Transportation Statistics
(<http://www.bts.gov/>)

Federal Highway Administration
(<http://www.fhwa.dot.gov/>)

U.S. Coast Guard
(<http://www.uscg.mil/welcomex.html>)

U.S. Environmental Protection Agency
(<http://www.epa.gov/>)

Office of Air and Radiation
(<http://www.epa.gov/oar/>)

Office of Air Quality Planning and Standards
(<http://www.epa.gov/oar/oaqps/>)

Office of Atmospheric Programs
(<http://www.epa.gov/oar/oap.html>)

Office of Mobile Sources
(<http://www.epa.gov/docs/OMSWWW/omshome.htm>)

Office of Radiation and Indoor Air
(<http://www.epa.gov/oar/oria.html>)

Office of Policy
(<http://www.epa.gov/oppe/oppe.html>)

Center for Environmental Information and Statistics
(<http://www.epa.gov/ceis/>)

Office of Prevention, Pesticides, and Toxic Substances
(<http://www.epa.gov/internet/oppts/>)

Office of Pollution Prevention and Toxics
(<http://www.epa.gov/opptintr/index.htm>)

Office of Pollution Prevention Lead Page
(<http://www.epa.gov/lead>)

Office of Pesticide Programs
(<http://www.epa.gov/pesticides>)

Office of Solid Waste and Emergency Response
(<http://www.epa.gov/swerrims/>)

Office of Water
(<http://www.epa.gov/OW/>)

Office of Wetlands, Oceans and Watersheds
(<http://www.epa.gov/OWOW/>)

Office of Science and Technology
(<http://www.epa.gov/OST/>)

Office of Wastewater Enforcement and Compliance
(<http://www.epa.gov/OW-OWM.html/>)

Office of Ground Water and Drinking Water
(<http://www.epa.gov/safewater/>)

National Science Foundation
(<http://www.nsf.gov>)

National Aeronautics and Space Administration
(<http://www.hq.nasa.gov>)